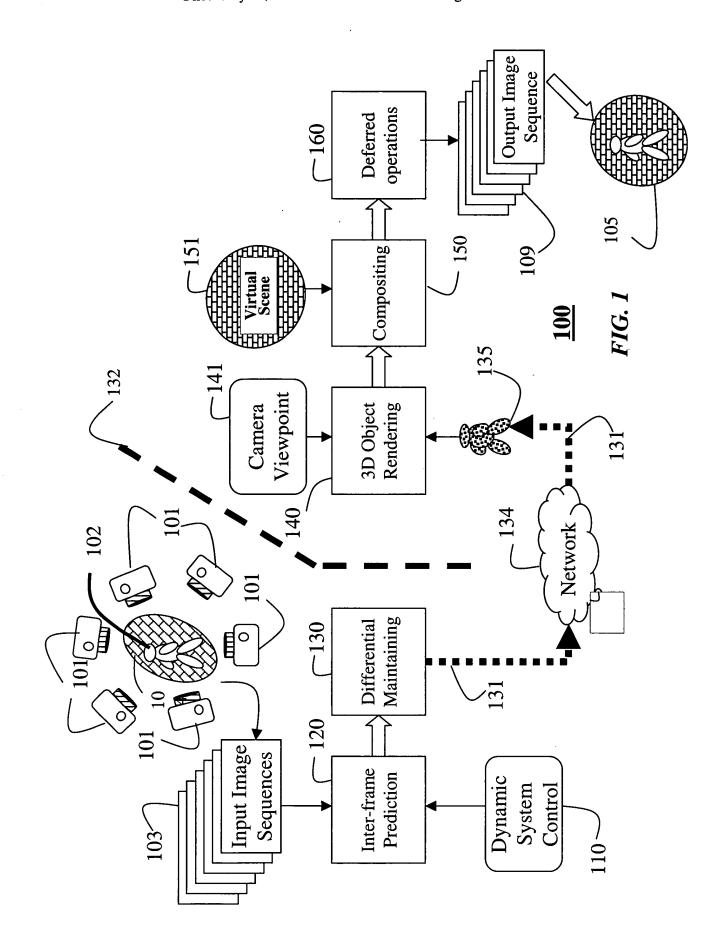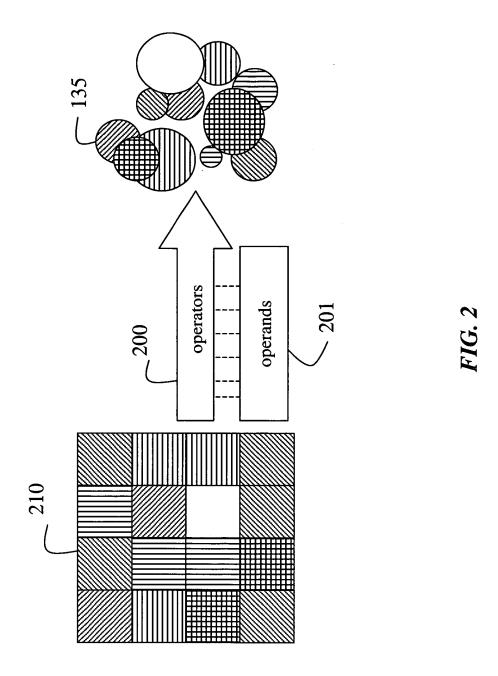Differential Stream of Point Samples for Real-Time 3D Video
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FIG. 1

100

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135

operators

200

operands

201

210

FIG. 2

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INSERT: $(\bar{\mathbf{p}}, \mathbf{c}) \rightarrow (\dot{\mathbf{P}}, \mathbf{c}, \mathbf{n})$

DELETE: $(\bar{\mathbf{p}}) \rightarrow (\dot{\mathbf{P}})$

UPDATECOL: $(\bar{\mathbf{p}}, \mathbf{c}) \rightarrow (\dot{\mathbf{P}}, \mathbf{c})$

UPDATEPOS: $(\bar{\mathbf{p}}) \rightarrow (\dot{\mathbf{P}}_{old}, \dot{\mathbf{P}}_{new}, \mathbf{n}_{new})$

UPDATEPOSCOL: $(\bar{\mathbf{p}}, \mathbf{c}) \rightarrow (\dot{\mathbf{P}}_{old}, \dot{\mathbf{P}}_{new}, \mathbf{n}_{new}, \mathbf{c})$

300

FIG. 3

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$$\overline{fg}(\mathbf{p}, t) \wedge \overline{fg}(\mathbf{p}, t-1) \wedge \overline{cd}(\mathbf{p}, t, t-1): \quad \textit{color unchanged}$$

$$\overline{fg}(\mathbf{p}, t) \wedge \overline{fg}(\mathbf{p}, t-1) \wedge cd(\mathbf{p}, t, t-1): \quad \textit{color changed}$$

$$\overline{fg}(\mathbf{p}, t) \wedge \neg\overline{fg}(\mathbf{p}, t-1): \quad \textit{new}$$

$$\neg\overline{fg}(\mathbf{p}, t) \wedge \overline{fg}(\mathbf{p}, t-1): \quad \textit{expired}$$

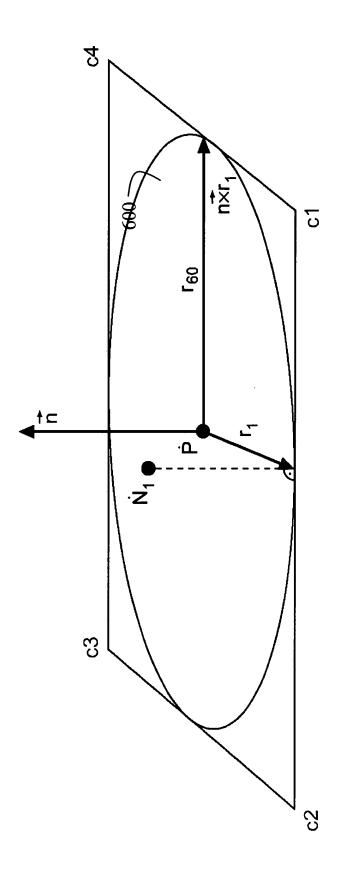$$\neg\overline{fg}(\mathbf{p}, t) \wedge \neg\overline{fg}(\mathbf{p}, t-1): \quad \textit{background}$$

400

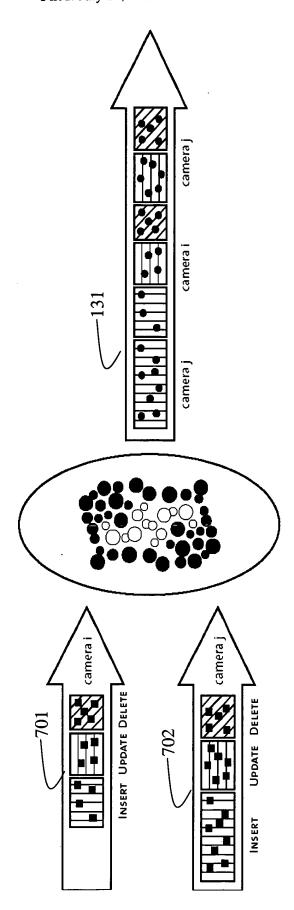*FIG. 4*

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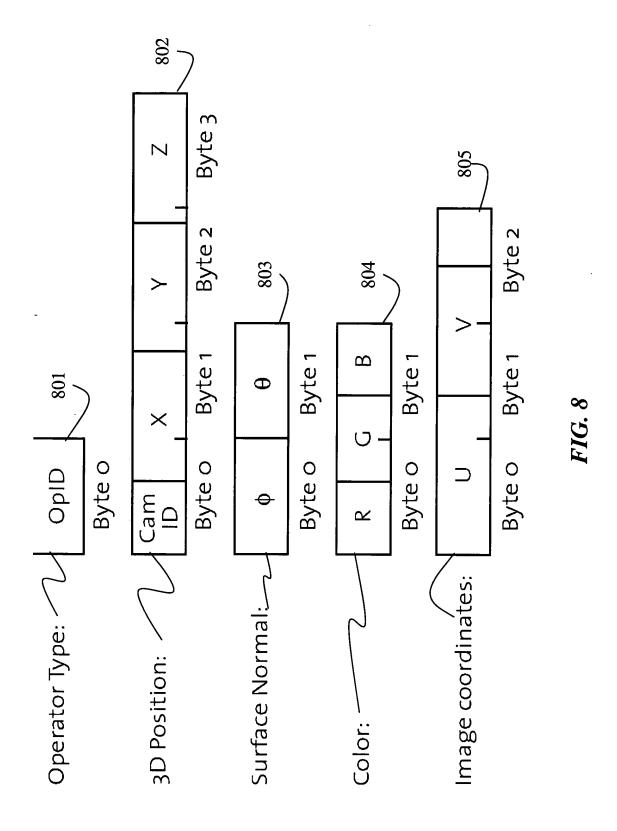

FIG. 5

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FIG. 6

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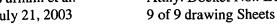
FIG. 7

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FIG. 8

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FIG. 9